

Rural & Residential Road Rehabilitation -- No. 500914

Category	Transportation	Date Last Modified	January 09, 2008
Subcategory	Highway Maintenance	Required Adequate Public Facility	No
Administering Agency	Public Works & Transportation	Relocation Impact	None.
Planning Area	Countywide	Status	On-going

EXPENDITURE SCHEDULE (\$000)

Cost Element	Total	Thru FY07	Est. FY08	Total 6 Years	FY09	FY10	FY11	FY12	FY13	FY14	Beyond 6 Years
Planning, Design, and Supervision	5,400	0	0	5,400	600	800	1,000	1,000	1,000	1,000	0
Land	0	0	0	0	0	0	0	0	0	0	0
Site Improvements and Utilities	0	0	0	0	0	0	0	0	0	0	0
Construction	20,300	0	0	20,300	400	900	3,100	4,400	5,300	6,200	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	25,700	0	0	25,700	1,000	1,700	4,100	5,400	6,300	7,200	*

FUNDING SCHEDULE (\$000)

Recordation Tax Premium	7,700	0	0	7,700	0	200	600	1,400	2,300	3,200	0
G.O. Bonds	18,000	0	0	18,000	1,000	1,500	3,500	4,000	4,000	4,000	0
Total	25,700	0	0	25,700	1,000	1,700	4,100	5,400	6,300	7,200	0

DESCRIPTION

This project provides for the major rehabilitation of residential roadways in older communities to include extensive pavement rehabilitation and reconstruction including the associated rehabilitation of ancillary elements such as under drains, subgrade drains, and curbs and gutters (if present). This project will not make major changes to the location or size of existing drainage structures, if any. A recent sampling of residential roadway pavements indicate that over 1,400 lane-miles of residential roadway pavement require structural rehabilitation. Pavement reconstruction is the rehabilitation or replacement of the entire existing pavement structure by the placement of an equivalent or increased pavement structure. Rehabilitation usually requires the total removal and replacement of pavement exhibiting widespread areas of fatigue related distress, base failures, subgrade failures and where an otherwise aggressive pavement restoration approach is deemed impractical. Rural and residential roads that have been rated as "poor" (level 2) or "very poor" (level 1) conditions will be rehabilitated.

JUSTIFICATION

The Department of Public Works and Transportation (DPWT) has undertaken a sample study of residential road pavement conditions utilizing a pavement condition rating system based upon types of observed distress (i.e., areas of pavement fatigue, base and sub-base failures, cracking, spalling, patches, and profile) and extent of observed distress (i.e., percentage of surface area exhibiting various forms of distress). Based upon levels of observed pavement distress, pavements are rated as very good (level 5), good (level 4), fair (level 3), poor (level 2), and very poor (level 1). The study included a cross section of approximately 6 percent of the residential road inventory (248 lane miles). The study, which is deemed representative of the residential road inventory as whole, will be expanded to include the entire rural and residential road inventory of 3,885 lane miles. The expanded study, to be conducted by a consultant is expected to be completed by August 2008.

OTHER

Hot mix asphalt pavements have a finite service life of approximately 20 years based upon a number of factors including but not limited to: original construction materials, means and methods; underlying soil conditions, drainage, daily traffic volume (ADT), other loading such as construction traffic and heavy truck traffic, age, and maintenance history.

A well maintained residential road carrying low to moderate traffic levels is likely to provide a service life of 20 years or more. Conversely, lack of programmed maintenance will shorten the service life of residential roads considerably, in many cases to less than 15 years before rehabilitation is needed.

OTHER DISCLOSURES

- A pedestrian impact analysis has been completed for this project.
- * Expenditures will continue indefinitely.

APPROPRIATION AND EXPENDITURE DATA

Date First Appropriation	FY09	(\$000)
First Cost Estimate		
Current Scope	FY09	18,000
Last FY's Cost Estimate		0
Appropriation Request	FY09	1,000
Appropriation Request Est.	FY10	1,700
Supplemental Appropriation Request		0
Transfer		0
Cumulative Appropriation		0
Expenditures / Encumbrances		0
Unencumbered Balance		0
Partial Closeout Thru	FY06	0
New Partial Closeout	FY07	0
Total Partial Closeout		0

COORDINATION

Washington Suburban Sanitary
Commission
Washington Gas Light Company
Department of Permitting Services
PEPCO
Cable TV
Verizon
Montgomery County Public Schools
Regional Services Centers
Community Associations
Commission of People with Disabilities

MAP

